To: Possiel, Norm[Possiel.Norm@epa.gov]; Dennis, Robin[Dennis.Robin@epa.gov]

Cc: Gary Shenk[GShenk@chesapeakebay.net]; Batiuk, Rich[Batiuk.Richard@epa.gov]; Kelly,

James[kelly.james@epa.gov]

From: Lewis Linker

**Sent:** Thur 4/17/2014 5:15:54 PM

**Subject:** RE: Earthecho and Chesapeake Bay Air Dep. **MAIL\_RECEIVED:** Thur 4/17/2014 5:16:10 PM

Atmo Dep & CB TMDL 10-13.pdf

Great. Thanks for the corrections Norm. Very helpful. In this case it sounds like the scenarios of the 2002 emissions and the 2011 emissions will be a point of comparison with the previous CMAQ version of 2002 emissions and 2010 emissions (see attached).

All the best,

- Lew

From: Possiel, Norm [mailto:Possiel.Norm@epa.gov]

Sent: Thursday, April 17, 2014 12:41 PM

To: Lewis Linker; Dennis, Robin

Cc: Gary Shenk; Rich Batiuk; Kelly, James

Subject: RE: Earthecho and Chesapeake Bay Air Dep.

Lew,

A few clarifications on the modeling scenarios we are doing for the Chesapeake Bay Program. We plan to model emissions for the years 2002, 2011, 2018 and 2025. These scenarios will use meteorology for 2011.

Norm

From: Lewis Linker [mailto:LLinker@chesapeakebay.net]

**Sent:** Thursday, April 17, 2014 11:59 AM

**To:** Dennis, Robin; Possiel, Norm **Cc:** Gary Shenk; Batiuk, Rich

Subject: Earthecho and Chesapeake Bay Air Dep.

## Hi Robin:

I finally got a chance to see what Earthecho did with our background interviews Chesapeake Bay NOx. It actually looks pretty good. Check it out at:

http://earthecho.org/expeditions#day-5

Also, attached is the approved version of the air-water exchange. It will likely have fairly limited use but I'm glad we finally have approval of the method.

All the best & I hope you enjoyed your time at the NADP conference,

- Lew

From: Lewis Linker

**Sent:** Thursday, April 10, 2014 6:47 PM

To: 'Dennis, Robin'; Norm Possiel (possiel.norm@epa.gov)

Cc: Gary Shenk; Rich Batiuk

Subject: CMAQ Scenarions for Chesapeake Bay Program

## Hi Robin:

It was good chatting with you today. I understand from our talk that Norm is preparing to provide to the Chesapeake Bay Program new CMAQ scenarios that use the bidirectional NH4 simulation. The new scenarios will be of **2011** (which includes the 2010 CAIR implementation) **2017** (which includes implementation of the Tier 3 Fuel Rule) and **2025** (the year when all CBP implementation for the TMDL is to be completed). The three scenarios will all use 2002 emissions. Norm, you should know that getting the three above scenarios to the CBP by the July/August 2014 timeframe will be fine.

Also Robin, you had described a series of scenarios coming after Norm's three scenarios. The scenarios would use the latest version of the CMAQ bidirectional ammonia and would be for 2005 to 2012 with each of the year having its own separate 2005 to 2012 emission and meteorological data sets. A 2025 Scenario will be run on the latest CMAQ version as well. I think you had said too that there would be some provisions made to be able to see the differences

with the 2002 emission data set we used for the CMAQ scenarios developed for the 2010 TMDL.
Please let me know if I'm missing anything and, as always, thank for your help Robin and Norm.
Best,
- Lew